CLAIMS

What is claimed is:

1. A device for effecting ultrasound-assisted inoculation of cells, comprising:

an ultrasonic transducer; and

a glass fibre coupled to the ultrasonic transducer, wherein the glass fibre is configured to transmit ultrasonic energy into a vicinity of cells to be inoculated in a fluid containing an inoculation medium.

2. The device of claim 1, further comprising a measuring device coupled to the glass fibre and configured to detect by ultrasonic impedance measurement the beginning of cavitation by the glass fibre.

3. A device for effecting ultrasound-assisted inoculation of cells in a tissue aggregation, comprising:

an ultrasonic transducer;

a flexible glass fibre coupled to the ultrasonic transducer; and

a catheter through which the flexible glass fibre extends, wherein the flexible glass fibre is configured to transmit ultrasonic energy into a vicinity of cells to be inoculated in a tissue aggregation.

4. The device of claim 3, further comprising a measuring device coupled to the flexible glass fibre and configured to detect by ultrasonic impedance measurement the beginning of cavitation by the flexible glass fibre.

5. A method for effecting ultrasound-assisted inoculation of cells, comprising:

providing a device comprising an ultrasonic transducer and a glass fibre coupled to the ultrasonic transducer; and

transmitting ultrasonic energy via the glass fibre into a vicinity of cells to be inoculated in a fluid containing an inoculation medium.

6. The method of claim 5, wherein providing a device further comprises providing a measuring device coupled to the glass fibre and configured to detect by ultrasonic impedance measurement the beginning of cavitation by the glass fibre.

7. A method for effecting ultrasound-assisted inoculation of cells, comprising:

providing a device comprising an ultrasonic transducer, a flexible glass fibre coupled to the ultrasonic transducer, and a catheter through which the flexible glass fibre extends; and

transmitting ultrasonic energy via the flexible glass fibre into a vicinity of cells to be inoculated in a tissue aggregation.

8. The method of claim 7, wherein providing a device further comprises providing a measuring device coupled to the flexible glass fibre and configured to detect by ultrasonic impedance measurement the beginning of cavitation by the glass fibre.